

CLAIMS

What is claimed is:

1. A method for identifying an agent which modulates the association of a transcription regulator and a transcription factor, the method comprising:

combining (i) a regulator of gene expression comprising a polynucleotide sequence derived from SEQ ID NO:32 wherein said polynucleotide sequence has cis transcriptional regulatory activity, (ii) at least one transcription factor having trans transcriptional regulatory activity which interacts with said regulator, and (iii) a candidate agent, said combining performed under conditions wherein, but for the presence of the candidate agent, the regulator and the transcription factor form a first association; and

detecting the presence of a second association of the regulator and the transcription factor, wherein a difference between the first and the second association indicates that the candidate agent is an agent that modulates the association of the transcription regulator and the transcription factor.

2. The method of claim 1, wherein said regulator of gene expression is operably linked to a reporter sequence.

3. The method of claim 2, wherein the method is an *in vitro* cell-based transcription assay.

4. The method of claim 3 wherein:

the combining step comprises contacting (a) a cell comprising (i) the regulator operably linked to the reporter sequence, and (ii) the transcription factor, with (b) the candidate agent, under conditions wherein, but for the presence of the candidate agent, the regulator and the transcription factor form a first association resulting in a first expression of the reporter sequence; and

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the detecting step comprises detecting the presence of a second expression of the reporter sequence, wherein a difference between the first and the second expression indicates that the candidate agent is an agent that modulates the association of the transcription regulator and the transcription factor.

5. The method of claim 4, wherein the detecting step comprises detecting a colorimetric or luminescent signal resulting from expression of the reporter sequence.

6. The method of claim 4, wherein the reporter sequence is detected by hybridization to a probe nucleic acid specific for the reporter sequence.

7. The method of claim 4, wherein said cell is an endothelial cell.

8. The method of claim 7, wherein said endothelial cell is a mammalian cell.

9. The method of claim 8, wherein said mammalian cell is selected from the group consisting of human cells, bovine cells, and rodent cells.

10. The method of claim 4, wherein said cell is transfected with the regulator operably linked to the reporter sequence.

11. The method of claim 10, wherein said transfected cell is transiently transfected.

12. The method of claim 1, wherein said regulator of gene expression consists of the polynucleotide sequence presented as SEQ ID NO:32.

13. The method of claim 1, wherein said regulator of gene expression consists of X contiguous nucleotides, wherein (i) the X contiguous nucleotides have at least about 90%

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identity to Y contiguous nucleotides derived from SEQ ID NO:32, (ii) X equals Y, and (iii) X is greater than or equal to 50.

14. The method of claim 13, wherein X is greater than or equal to 500.

15. The method of claim 1, wherein the method is an *in vivo* transcription assay.

16. The method of claim 15, wherein a transgenic animal comprises said regulator operably linked to the reporter sequence.

17. The method of claim 15, wherein
the combining step comprises introducing the candidate agent into the transgenic animal, under conditions wherein, but for the presence of the candidate agent, the regulator and the transcription factor form a first association resulting in a first expression of the reporter sequence; and
the detecting step comprises detecting the presence of a second expression of the reporter sequence, wherein a difference between the first and the second expression indicates that the candidate agent is an agent that modulates the association of the transcription regulator and the transcription factor.

18. The method of claim 17, wherein said introducing is accomplished via a route selected from the group consisting of oral, intravenous, intramuscular, transdermal, and mucosal.

19. The method of claim 1, wherein said agent is a candidate for inhibiting angiogenesis.

20. The method of claim 1, wherein said reporter sequence encodes a light generating protein.

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21. The method of claim 20, wherein the sequences encoding the light-generating protein are obtained from either procaryotic or eucaryotic sources.

22. The method of claim 21, wherein the light generating protein is a luciferase.

23. An isolated polynucleotide comprising, the sequence presented as SEQ ID NO:32.

24. An isolated polynucleotide comprising, a cis-acting transcription regulator having X contiguous nucleotides, wherein (i) the X contiguous nucleotides have at least about 90% identity to Y contiguous nucleotides derived from SEQ ID NO:32, (ii) X equals Y, and (iii) X is greater than or equal to 50.

25. The isolated polynucleotide of claim 24, wherein X is in the range of 50-3570 including all integer values in that range.

26. The isolated polynucleotide of claim 24, wherein X is greater than or equal to 500.

27. An expression cassette comprising
a cis-acting transcription regulator comprising X contiguous nucleotides, wherein (i) the X contiguous nucleotides have at least about 90% identity to Y contiguous nucleotides derived from SEQ ID NO:32, (ii) X equals Y, and (iii) X is greater than or equal to 50, wherein said regulator is operably linked to a reporter sequence.

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